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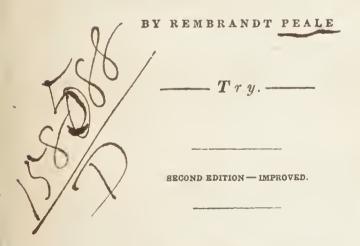
MANUAL

OF

DRAWING AND WRITING,

FOR THE USE OF

SCHOOLS AND FAMILIES



PHILADELPHIA:

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PREFACE.

Accuracy and facility alone can render the art of drawing practically useful, and a permanent acquisition. A system that professes to teach too much, is as ineffectual, from the multitude and confusion of its parts, as one that teaches too little, by the want of method and deficiency of means. That which is now offered is the result of long experience, and is not only rendered more simply analytical and progressive, than any thing hitherto published; but improved by several new propositions and principles, by which some of the greatest difficulties are obviated, and the whole explained in a concise manner, intelligible to the most ordinary capacity. Indeed, more effort has been devoted to reduce the details into their present compass and simplicity, than would have been required to swell them into the dimensions of an intricate and costly volume.

In the demonstration of elementary principles, sufficient means are afforded by wood cuts and the xylographic process; which, being somewhat like pencil or ink drawings and writing, will be found to encourage the student; who may afterwards, should taste or genius prompt, have recourse to engravings of more refined and expensive execution.

SINCE the first edition of this work was printed, a page of capitals, more ornamental, has been added, to show that the system which has been adopted can be carried to any extent that taste or fancy may dictate—in the imitation or formation of letters—the parallel lines in all cases serving to divide the letters into proportional parts, and rendering their peculiarities always intelligible, at a glance, to those who have arrived at the requisite facility in drawing.

When the principles of drawing are clearly understood, and have become familiar by practice, and before any attempt be made at writing, the student should draw, with point or pencil, the correct forms of writing, only as extended lessons in drawing. After the eye and judgment are satisfied, by repeated corrections and variations, what forms of letters are desirable, then, and not sooner, should the hand be trained to execute them with fluency and facility, with pen and ink.

It is advisable that the student of drawing, if old enough, should learn to rule his own books, according to the lessons which are to be studied, and the repetitions which may be required. The measurement of lines, and their mechanical execution, forming an essential part of the system which is to be learnt, the teacher should see that they are properly done, before any use of them be attempted. If a pair of compasses are not at hand, a strip of paper may serve to mark, by dots, the proportions of lines to be ruled.

This system of drawing is obviously calculated to facilitate the peculiar explanations of every writing master; who should in fact be also the teachers of elementary drawing—at once lessening their own and

their pupils' labours, and extending the advantages of their experience and situation as *Graphic Professors*.

The experience of the persevering Pestalozzi, and his associates, in Switzerland, having shown the advantage of teaching the elements of drawing previous to writing, they invented an alphabet of writing—a single diagram—which is good as far as it goes, but quite inadequate to explain the whole system. The Graphics not only supply the deficiencies of former systems, and simplify the process of instruction, but show the connexion between drawing and writing, and demonstrate the identity of their principles.

EXTRACTS FROM PESTALOZZI.

"Our artists have no elements of measure; but by long practice they acquire a greater or less degree of precision in seizing and imitating outlines, by which the necessity of measuring is superseded. Each of them has his own peculiar method of proceeding, which, however, none of them is able to explain. Hence it is, that if he comes to teach others, he leaves his pupils to grope in the dark, even as he did himself, and to acquire, by immense exertion and great perseverance, the same sort of instinctive feeling of proportions. This is the reason why art has remained exclusively in the hands of a few privileged individuals, who had talents and leisure sufficient to pursue that circuitous road. And yet the art of drawing ought to be an universal acquirement, for the simple reason, that the faculty for it is universally inherent in the constitution of the human mind. can, at all events, not be denied by those who admit that every individual born in a civilized country has a claim to instruction in reading and writing. For let it be remembered, that a taste for measuring and drawing is invariably manifesting itself in the child, without any assistance of art, by a spontaneous impulse of nature; whereas the task of learning to read and write is, on account of its toilsomeness, so disagreeable to children, that it requires great art, or great violence, to overcome the aversion to it which they almost generally evince; and that, in many instances, they sustain a greater injury from the means adopted in gaining their attention, and enforcing their application, than can ever be repaired by the advantages accruing to them from the possession of those two mechanical acquirements. In proposing, however, the art of drawing, as a general branch of education, it is not to be forgotten, that I consider it as a means of leading the child from vague perceptions to clear ideas."

"The art of writing, to be taught consistently with nature, ought to be treated as subordinate to that of drawing, and to all its preparatory acquirements, especially the art of measuring."*

"Writing is no more, nay even less, than drawing, to be taught without a previous proficiency in the measuring of lines; for, in the first instance, writing itself is a sort of linear drawing, and that of stated forms, from which no arbitrary or fanciful deviation is permitted; and, secondly, the practice of writing, when acquired previous to, and independently of, drawing, spoils the hand and mars its freedom, by confining it to a few peculiar forms on a contracted scale, instead of cultivating in it a general ability for all forms. Another reason, why drawing ought to be taught before writing, is, that by the previous acquirement of drawing the formation of the letters is

^{*} Measuring, Pestalozzi considered as the art of apprehending, and drawing as that of representing correctly the outline of any object.

greatly facilitated, and all that time is saved which children generally spend in correcting bad habits, contracted by a long practice of bad writing, and substituting a good hand for the mis-shaped and incorrect characters to which they have been for years accustomed. But of all the arguments that may be urged on this subject, the most important is, that the child should learn to do every thing in perfection from its beginning, which he will not be able to do in writing, unless this acquirement be built upon an elementary course of drawing."



INTRODUCTION.

In America, more than any other country, it is necessary to bestow on the rising generations the advantages of a good education, which therefore has received, and must continue to receive, the zealous attention of intelligent and benevolent individuals. The States are successively adopting plans for insuring the means of general instruction, and Seminaries are every where arising to vie with each other in facilitating the acquisition of knowledge; whilst teachers of experience and literary men are employing their talents in the production, compilation, and improvement of school books, and elementary treatises.

Among the branches which are usually taught, the important one of Writing has received much attention, and numerous professors have labored to improve its principles and practice;—still something else is required to lessen the difficulties of instruction. The Art of Drawing, sufficiently simple in its nature, has been a mystery in the hands of a few, not many of whom are able to explain the principles upon which they practise. In the System which is here offered to the public, these principles are explained, in a manner so simple, that every student may readily acquire a competent proficiency. The degree of facility which may be attained

must depend on the attention that is bestowed, and the amount of practice.

Drawing, the simplest of languages, is understood by all, except the blind, and can be practised even by the deaf and duml. It is the most useful of the arts, because it is their handmaid in arranging and defining their purposes; instantly rendering intelligible details that would be obscure, and gratifying the sentiment of taste, by giving to objects of manufacture the attractive forms of elegance. The language which is spoken by the draughtsman becomes the law and guide of the workman. The rudest materials are rendered precious by its influence, and almost every occupation in life presents occasions for its service. Its utility is universally acknowledged, and every child exhibits its power to arrest attention, and its influence in conveying instruction. Hence its extensive employment, especially in modern books of education and science. Geometry, Mensuration and Surveying are founded on its elements; whilst Geography, with every kind of local description, are greatly facilitated to the eye which is accustomed to drawing.

In Germany, drawing has long been a part of common education; and in France the facilities for its acquirement are widely spread; consequently, in those countries, and in some degree in England, many of their manufactures have greatly improved in taste and beauty. These are advantages of national importance; because they are not confined to the individuals immediately concerned, but their benefits necessarily extend through all classes of society.

The advantages of speech are enjoyed by almost all mankind, of whom but a small number advance to the refinements and power of eloquence. In like manner

although only a few, peculiarly talented, may succeed in becoming proficients in the higher departments of drawing or painting, yet every one, without any genius but application, may learn the simple elements of this art in a degree sufficient for the most useful purposes; the labour of acquirement being lessened by the pleasure and evident value of the immediate results.

The advantages of correct perception and accurate discrimination belong to the educated eye, and the power of exact definition and precise demonstration alone to the experienced hand. Whoever has acquired the art of drawing, together with the habits of observation which are induced by it, possesses an ever varying fund of enjoyment. Not only are the works of art better understood by those who can draw, but the heavens and the earth display their beauties and magnificence in an endless succession of natural pictures, with greater charm to his instructed eye; and are more productive of refined and inexhaustible pleasure.

Writing is nothing else than drawing the forms of letters. Drawing is little more than writing the forms of objects. Every one that can learn to write is capable of learning to draw; and every one should know how to draw, that can find advantage in writing. The two may be taught together without increasing the task of the learner, provided the teacher understands the right method; which is to habituate the hand to move in all directions, and the eye to judge whether the movements be correct. The art of drawing, therefore, requires a knowledge of the forms and proportions of objects, and the practice of marking them on a plane surface, as they might be marked on a glass held between the eye and the objects.

Writing is chiefly acquired by practice, and executed

without thought, becoming so mechanical a habit, by constant repetition, that the writer can seldom form his letters but after one fashion. Those persons, therefore, who are capable of diversifying their writing, have learned to draw their letters after different models; and can, with comparative facility, learn to draw the forms of other objects.

The greatest difficulty experienced by writers in learning to draw, is in making perpendicular lines. This is owing to the early habit of sloping the letters in writing, which would be less restrictive if children were previously taught the letters of the alphabet, by copying them from letter press, particularly the Roman capitals; by which practice they would insensibly and effectually acquire the elements of drawing.

The elements of drawing consist of perpendicular, horizontal, diagonal, and circular lines; by means of which the general forms of objects may be represented. Observation and practice, with some exercise of memory, will be necessary to employ these lines in their just

proportions and proper places.

To promote these views, after having examined the different modes of instruction practised in England, France, and Italy, this Manual of Drawing has been prepared to correct the imperfections and supply the deficiencies of other elementary works. With this is connected a simple System of Writing, as dependent upon drawing, and naturally growing out of it. They may be taught together with economy of time and obvious benefit, as the irksomeness of Writing will disappear in the pleasure of Drawing. The simplicity of this Manual will recommend it to every parent and teacher, and its small price place it within the reach of every scholar. It is a little ladder, reaching to valuable attainments, if the

steps, which are few and easy, are mounted singly and steadily—commencing with the laudable spirit of the recommendatory motto, "Try."

It is worthy of especial remark, that there is no person, however ignorant of drawing, who does not habitually discriminate between the proportions and contours of objects, even in the human countenance, in their most minute variations. This demonstrates the universal accuracy of the eye, and leaves us to conclude that nothing more is required to become draughtsmen, than to analyze those objects, to reason upon their proportional differences, to define them by specific rules, and to acquire, by strict manual exercise, a habit of prompt obedience to the will in the imitation of those contours; as all the facility which is necessary and may be attained in drawing, as in writing, depends upon the habits of motion to which the fingers and wrist may be trained by frequent observations and practice.

But it is essential to the success of the student, that the first lesson should be fairly studied and practised, until accuracy and facility are attained, before any attention be paid to the second; and so on through the whole course. A rigid compliance with this injunction is equally required of the apt and the dull; for the latter, by undeviating attention, may, like the tortoise in the fable, win the race in competition with the former in a careless and erratic course. It is truly said by Sir Joshua Reynolds, that "nothing is denied to well direct-

ed industry."

It is incumbent on the Parent or Teacher, to understand the meaning of each page as it occurs, and to see that the pupil also understands it, before another step be taken, which thus is made easy and a guide to what fol-

lows. Begin—do something—the best you can, no matter how bad—you have then something to correct. The practice of correction will teach more than if you had done it right by accident. Repeated corrections lead to excellence.

Professor Leiber, in his report to the Trustees of the Girard College, warmly recommends Drawing as an essential part of early education, quoting Goëthe, who has said "We talk too much and draw too little." He remarks that those who draw well have more distinct conceptions of what they see, and explain their views with most certainty and effect; he therefore deems it an object of the greatest importance to cultivate in young persons, by means of drawing, a facility and accuracy in discriminating the characteristic forms of objects at first sight, and adds, that "persons who never see attentively, and whose eyes convey but dim images to the mind, never become good observers and seldom close reasoners; nor does their memory long retain those ill defined images and superficial impressions."

MATERIALS.

THE cheapest materials for elementary practice in drawing and writing are, doubtless, the slate and slatepencil, which are to be employed as far as economy may require; but as writing must ultimately be practised with pen on paper, so drawing must be made familiar with its proper materials, pencil and paper, pen and ink.

As it is more desirable to acquire a habit of general accuracy than to exhibit merely the beauty of neat and smooth outlines in drawing, gray cartridge or coarse white paper is to be preferred. When the paper is coarse, its cheapness will favour an abundant use of it, and no other merit will be sought for than that of correctness in the proportions and facility of execution. It will be easy enough afterwards to superadd the refinements of surface and finish on more costly paper, or the smoothest Bristol boards.

The best material for acquiring freedom in sketching is fine charcoal, made of small branches of willow or poplar, divested of bark, dried and burned in a close vessel, or crucible filled with sand, and suffered to get cold before exposure to the air. These charcoal erayons may be cut sufficiently pointed, produce a light stroke, and may be brushed out so as to admit of repeated corrections, which may be made on cartridge paper, canvass, or painted board. When sufficiently corrected, the drawing may be confirmed and rendered more permanent, if necessary, either with lead pencil, Italian chalk, or French crayon.

Hard lead pencils are necessary for fine or minute drawing, but lead that is fine and soft is best for slight and spirited sketches. The errors with lead pencil are easily erased for correction by means of Indian rubber or crumbs of bread.

Italian chalk (more correctly Spanish stone) must be used slightly damp, and produces lines that are not glossy, and do not easily smear or rub out.

Black crayon, from France, made of sized lampblack, of different degrees of hardness, is more intensely black; and, though comparatively harsh, admits of greater freedom and fulness of effect, especially in shading; but it is easily sullied by rubbing.

HOLDING THE PENCIL.

In writing, it is customary to hold the pen pressed between the thumb and second finger, letting the first finger rest on the quill. In drawing, it is better to hold the pencil between the thumb and fore-finger, resting it over the nail of the second finger; the fingers moderately bent, and the pencil held more perpendicularly to the paper than the pen is used in writing. In this position the pencil may be moved with more certainty and force in any direction, and, when necessary, with greater freedom, rolling, as it were, between the thumb and the first and second fingers.

In beginning to draw any figure, it is best to sketch it very lightly, marking only the general proportions; not, as some recommend, in a dotted manner, but in some-

what continuous light strokes; observing to correct the errors with Indian rubber or stale bread, without entirely rubbing out the false lines which are about it; after which it may be still further corrected and strengthened.

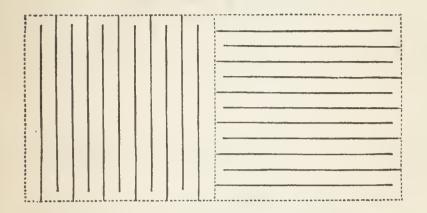
POSTURE.

THE desk or drawing board should be so much sloping as to present the paper nearly at right angles to the eye, and so low as to allow the elbow and hand to move without constraint in any direction. Otherwise the paper, canvass, or panel, should be placed on a frame or easel, so erect and elevated that the student, with extended arm, may sketch with greater freedom; especially as he advances in the study, and may be disposed to execute in large. The paper or board should remain stationary, and only the hand and elbow be varied to accomplish the different motions which may be found necessary.



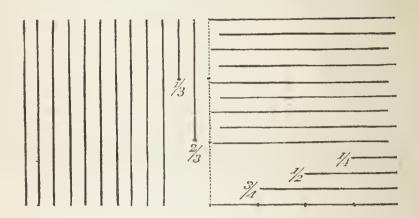
MANUAL OF DRAWING.

STRAIGHT LINES.



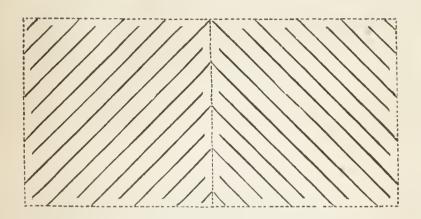
The first effort in drawing should be to acquire facility in making straight lines. For this purpose, divide a page, or more, into regular squares of about two inches, and, with a pencil or pen, without ruler or compasses, fill up the spaces with lines drawn parallel to each other; sometimes beginning at the top, and as often at the bottom; sometimes at the left, and as often at the right; until the hand attains an equal facility in drawing them in any direction, and the eye may be satisfied with their accuracy. It is not necessary that they should have the appearance of ruled lines, as if intended for drawing machinery or architecture; but rather a general correctness, like the resolute furrows of a well ploughed field.

PROPORTIONS OF LINES.



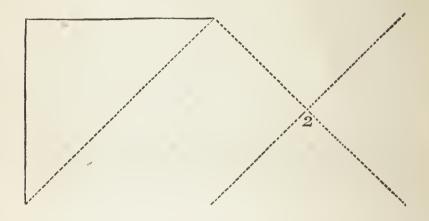
After drawing straight lines with accuracy, it is necessary to habituate the eye to measure their proportions. For this purpose, without any marked limits, draw lines parallel with each other, so that they might come within a square; or be of one half, third, fourth, or fifth of any given line—longer or shorter—without the aid of compasses, except to ascertain, after making it, if the attempt be correct. Efforts cannot be too often made to fix the rule and compass in the eye, which can be accomplished only by frequent observation and practice; for it must never be forgotten, that the art of drawing is the art of seeing and understanding, as well as of imitating with correctness; without which, facility itself would be a bad habit, as it would be only multiplying errors.

DIAGONAL LINES.



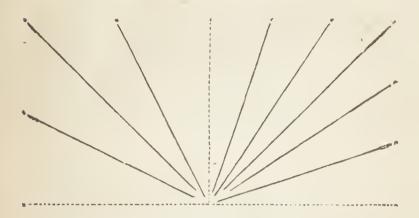
To acquire the habit of drawing lines truly diagonal, begin them at one corner of the ruled squares and cross to the other; filling up the spaces at each side with lines parallel to the first; and practise this as frequently upward as downward. The eye will thus soon become enabled to direct the hand in drawing a right angle triangle of any desired proportions, without the aid of the compasses, and without shifting the position of the paper, or too much varying the posture; although it is advisable sometimes to change the direction of the arm and elbow according to the tendency of the lines to be made. Oblique lines, the reverse of writing, are always the most difficult, and therefore require a longer course of practice.

RIGHT ANGLE AND DIAGONAL.



The previous lesson is exemplified in this diagram. Draw a perpendicular; then connect it with a horizontal of equal length. Although the eye cannot, at first, instantly perceive when the perpendicular and horizontal lines are made of equal length, running as they do in different directions, it is assisted by the use of the diagonal line, to which the eye must be already habituated as this line cannot be truly diagonal unless it be such as would cross from one corner of a square to the opposite; and further, that if crossed at its centre by another, as in fig. 2, they would cross at right angles, and, being of equal length, would form the limits of a square. Thus with a little practice may be obtained a facility in defining the length and breadth of a square, or a square and a half, or oblongs of any other proportions.

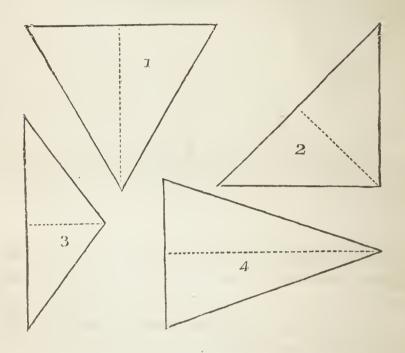
OBLIQUE LINES.



As the contours of various objects are more or less diagonal, it is necessary to judge of their obliquity by comparing them with real or imaginary perpendicular or horizontal lines; and to habituate the eye to measure within what dimensions of square or oblong the line in question might be comprised—viz., one half, third, fourth, &c. The dotted lines indicate those which may be measured and ruled, and the radiating lines may be practised from and to the centre.

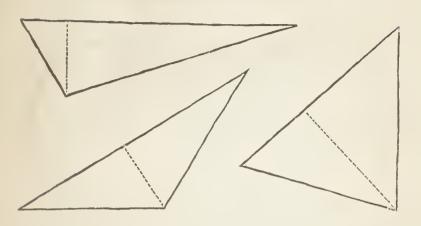
It is desirable not merely to possess the ability to draw these lines with certain proportions of obliquity at will, but to apply them, as real or imaginary lines, to assist in judging of the dimensions or relative situation of other objects. The importance of this application will induce a correspondent effort to attain sufficient precision of hand and eye.

REGULAR TRIANGLES.



The eye must be accustomed to notice the proportions of different angles, and always to refer them to some simple elements or principles; as, the triangle whose sides are of equal length, as fig. 1; the triangle, one of whose corners is a right angle or square, as fig. 2; or the triangles of obtuse or acute angles, as figures 3 and 4. It will require frequent practice before the student may be able to draw these figures without rule or compass, except to judge of the accuracy of his attempts. But he must not limit his view to the mere act of drawing these triangles; he must frequently, in noticing the proportions of objects, and their most obvious points, by a mental effort resolve them into triangles, with reference, always, to some imaginary perpendicular or horizontal line.

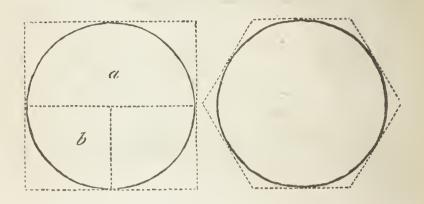
IRREGULAR TRIANGLES.



It will not be difficult now to comprehend and to draw other angles, either more acute or more obtuse, of every proportion and in any direction; and this not merely for the purpose and practice of drawing such figures, but as lines, and points, and distances, by which to ascertain the proportions of every object and its parts which are to be imitated.

Great advantage will arise, in looking at natural objects with a view to their imitation, from a constant habit of analyzing their proportions, by noting the character, dimensions, and direction of the triangular lines which may be imagined to run between the principal points; especially if associated with a reference to perpendicular and horizontal lines and points of comparison.

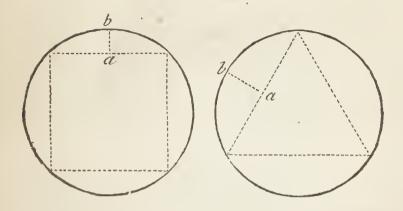
CURVES WITHIN ANGLES.



Curves are to be understood as they are proportioned by length and breadth, and cannot be more correctly imagined than as they may be found within certain straight or angular lines. It is not difficult to draw a circle within a regular figure of twelve equal sides; but a still more improving practice is to draw it within an octagon, hexagon, or square.

In drawing them, attention must be directed to make one section correspond with another, either in the semi-circular bows, as a, or in the sweep of the quadrants, as b. The eye and hand acquire correctness by a frequent practice of drawing curved lines, either circular or oval, to correspond with each other, on both sides of a perpendicular or horizontal line.

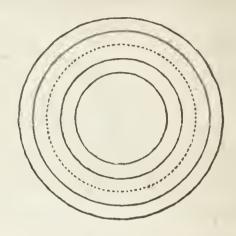
CURVES OUTSIDE OF ANGLES.



Circles drawn outside of squares and triangles demand a greater range of motion, and induce a greater freedom of hand, but require a more rigid circumspection; the angular corners serving only as so many equidistant points, and the straight lines as guides in regulating the proportions of the arcs or bows from a to b, on every side.

It is not so essential to obtain facility in drawing a true circle without correction, as to educate the eye to perceive accurately the proportions and symmetry of the parts, and to notice every indent or excess to be corrected in giving a uniform sweep to the curves. In making these corrections, it will be found best to correct and re-correct by additional strokes, without rubbing out the first lines, which may serve as guides in the revision, until the desired form be obtained.

PRACTICE OF THE CIRCLE.

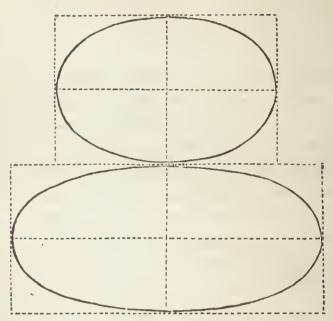


Circles or segments of circles may now be drawn, one within the other—outside and inside of one which may be made with the compasses, (as indicated by the dotted line,)—taking care to practise the hand by moving the pencil to the right and left, up and down, in portions, until the general aspect of the figure be obtained; for, the eye can more readily perceive a deviation from the regular figure than the hand can correct it; yet, being corrected again and again, with slight touches, it may, at last, be defined by a stronger or bolder line. Few artists have ever attained the ability of drawing such circles without amendment; nor is such perfection necessary. It is enough if the eye can perceive the errors, and the hand be able to correct them in detail.

PRACTICE OF CURVES.

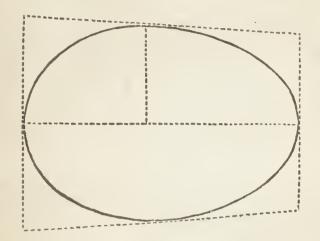
For the purpose of habituating the eye and hand to every sort of form and movement, it is recommended to draw a circle with the compasses, and then repeatedly to retrace or repeat the line; sometimes moving the pencil to the right hand, sometimes to the left. Serpentine lines, sections of curves, and combinations of straight and curved lines, drawn on a large scale, and repeated backwards and forwards, can be executed without the aid of a master, as the inaccuracies show themselves. This should be practised until the lines, though frequently repeated, shall be but little or irregularly widened; nothing more being intended than to habituate the hand to every motion, and an instantaneous obedience to the will. In this respect, tracing on tissue paper, though a mode of copying not solely to be relied on, and not calculated to teach the principles of drawing, or capable of producing any thing larger or smaller than the model yet is not without advantage in the practice here recommended, when found convenient to be resorted to.

OVALS.



There are various geometrical modes of making true ellipses or ovals; but for the general purposes of drawing, they may simply be considered as curves drawn within regular oblongs, which are thus made the measure of their proportions. An oval, therefore, must be understood as it may be comprised within an oblong, more or less narrow in proportion to its length; or in reference to a middle line of length and a cross line of breadth. Due attention must be paid, as with the circle and all regular curves, that one section may correspond with the opposite, so that if folded at the centre they should correspond and touch in all their course. It is therefore the best practice, in making them, to draw them in quarter sections, first on one side, then on the other.

EGG OR WEDGE-SHAPE OVAL.

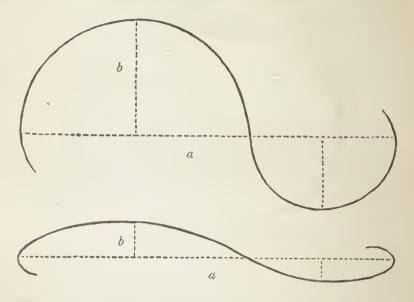


A curved line drawn within an irregular oblong or wedge shape figure, touching near the centre of each side, will produce an oval large at one end and small at the other, like an egg, or the human face.

In vases and other ornamental figures, very beautiful forms are made by the combination of regular ovals of different dimensions and proportions; but in most natural objects, especially the human face, a more exquisite beauty results from the variety afforded in the proportions of the egg-shape oval, more or less pointed. Every variety is to be found in the leaves of trees, petals of flowers, and fruit.

Ovals of various proportions should be drawn in every direction, to acquire facility in executing a form that is the element of so many beautiful objects.

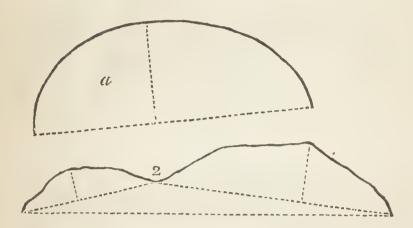
PROPORTIONS OF CURVES.



Curves, whether simple or compounded of more parts than one, may be further considered as they are found to be portions of circles or ovals; and they may be imitated by producing equal or similar swells upon a line, as α , supposed to run through them; taking care to imagine the supposed line in the copy to run in the same direction with that of the original.

The curved lines to be imitated may require the straight line, which may be supposed to intersect them, to run either in a perpendicular, horizontal, or oblique direction, to which due attention must be paid, as well as to the degree and regularity or irregularity of the swells or bows, to which the line b, has reference.

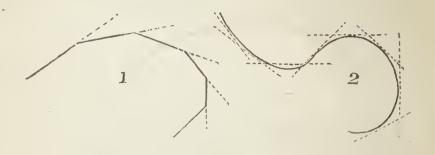
IRREGULAR CURVES.



Irregular curves, in whatever forms they occur, are best understood by examining such portions of them, as would resemble bows if intersected by straight lines; noticing the direction in which the strings or chords would run, and the angles they would form; whether the swell be in the centre or towards one end; and whether regularly rounded, flattened, or angular.

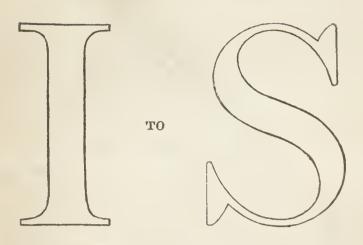
A section of the outline of an egg, fig. 1., exhibits a bow, whose greatest bend is at a. An irregular curve, as of a mountain, fig. 2., consisting of more than one swell, may be considered as so many bows or arches, whose proportions may be separately examined, as well as the direction of their chords or bases, or angles formed by them.

CURVES DEFINED BY ANGLES.



All curves may be considered as essentially composed of short angular lines, the direction and length of which determine the shape of the object, as in fig. 1, which is an example of a curve composed of segments of straight lines. The dotted lines are extended only to show more distinctly their direction; because the character of the entire form depends altogether upon the direction and length of the individual parts. Very few objects consist of lines so regularly curved as not to show some degree of angularity, which should always be observed in copying them. Fig. 2., shows in what manner any figure may be defined by angular boundaries. At a sufficient distance these angles are not perceived, and the lines appear only as curves. Artists call this angular style the blocking out of a form. It is a survey of the plot.

ROMAN CAPITALS.



The well known character of the forms and proportions of printed letters, which enables the copier to perceive when the task is rightly performed, constitutes the great advantage to be found in using the Roman Capitals as lessons for drawing. Every child that learns its letters should, at the same time, be taught to draw them, however rudely at first, and cannot be better employed unal a sufficient accuracy is obtained; but if this has not been done, the student of drawing should sedulously practice this exercise, commencing with the simplest and proceeding to the most difficult, according to some such arrangement as this, viz. IHLTFEAVKNZMYWXJD PBRCGOQUS. Such an application of the letters, which contain all the elements of form, will truly constitute it the Alphabet of Drawing, as explained in our analytical diagrams.



MANUAL OF WRITING.

TRANSITION FROM DRAWING.

THE regular course of drawing is here suspended, to introduce a system of writing which is essentially founded on that of drawing, and for which the student must be now prepared. To attempt to write before the eye has become critical of forms, and the hand can obey the judgment, is only to labour against reason, and to fall into bad habits. The teacher of writing endeavours to guard against these by the force of habit, which, in a degree, answers the purpose; but not with the certainty and charm which encourage such as have been prepared by the elements of drawing. It is time enough then to commence writing, which is of so much importance that its attainment is worthy of every effort; but no effort can be so effectual as one which follows a well grounded study of principles which are the foundation of that as well as so many other arts. Children are usually put to writing too young. They cannot begin to draw too soon. And they should not be permitted to learn to write until

they are somewhat prepared for it, which will make it easy, and desirable; indeed it is the only rational mode of proceeding, and chiefly advantageous as the eye is taught to judge without hesitation of every kind of line which the hand may be required to execute.

SYSTEMS OF PENMANSHIP.

Three distinct systems have hitherto prevailed. One which proposes to regulate the letters by three, four, or five ruled horizontal lines, as in music; another with a view to slope and breadth, which prescribes them to be written upon oblique lines with equidistant spaces; and the third, which furnishes pale outlines to be retraced with ink—a mode much practised in Germany both for writing and drawing, especially by means of copies placed underneath ground glass, upon which they may be traced.

Beginners who practise on the first method, though they learn to define the length of their letters, are apt to contract a scrawling hand, which is certainly prevented by the second mode; but to this there are two objections. One is, that some of the letters appear too distant from each other, as m-m, e-m, t-r, &c., whilst others seem too close together, as ed, el, et, &c. But the strongest-objection rests against the practice of tracing the letters, or of writing on the ruled lines, as it may be mechanically performed with little circumspection, and induces stiffness of manner. Yet it may be found profitable in some cases to examine into the merits of all

these methods, and to borrow from them whatever advantages they possess in assisting the eye or directing the hand.

The practice of writing between the oblique ruled lines, as proposed in the present system, for single characters or a few together, assuredly gives greater freedom to every stroke, and requires the eye constantly to judge of any deviation in line, curve, or breadth of letter. This or any other guide to penmanship, however, should be practised only until the eye becomes sufficiently familiar with the requisite proportions, and the hand can readily obey the will. It is necessary to write many copies between two ruled horizontal lines; afterwards with only one, as a bottom line; and finally to write without any lines at all, as soon as the eye can determine that the writing is straight and the letters are at agreeable distances and of sufficient bulk.

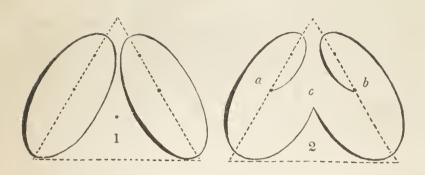
The universal practice of using ruled lines, broad and black, placed beneath the paper to be written on, which guides to sufficient straightness and equality of intervals, proves itself convenient and agreeable, and is found to induce a habit of neatness and regularity.

As in drawing, so in writing, it is an error to commence with heavy strokes. Accuracy of form is best attained by light lines; and all the beauties of hairstroke and swell can be afterwards studied, and easily grafted upon the true forms. It is enough to conquer one difficulty at a time; nor is it necessary to compel delicate little fingers to strain in the formation of very large letters in copies, the professed object of which is to teach a small current hand, when a medium size is sufficient for their definition.

It may be remarked, as advantageous in this Manual, that the elegances of copperplates have not been employ-

ed, which, both in writing and drawing, frequently deter young people from attempting to imitate them. Ruder lessons, given with the pencil or the pen, less perfect though they may be, are more within the reach of ordinary abilities. The object here is to teach correct principles and a good honest practice, a medium common-sense course, which may enable the student afterwards to acquire, by self-directed efforts, more varied refinements and elaborate excellences.

OBLIQUE OVALS.



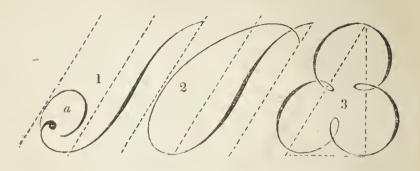
These diagrams furnish the transition from drawing to writing, and constitute for both purposes a useful practice. Draw an equilateral triangle, as Fig. 1.; dot its centre, and mark on each side its middle, quarter, and eighth. Commencing an eighth from the top or apex, draw on both the right and left sides ovals reaching near to the bottom and approaching the centre. Practice these in every manner, to the right and left, up and down. On a similar triangle, as Fig. 2., commence at a, and continue connectedly to b; then commence at b, and continue to a, till the glance of the eye becomes correct, and the hand both accurate and free.

The obliquity of line which is found in the side of an equi-lateral triangle being the most agreeable to the eye in the slope of writing, will render the oval drawn upon it the best practice for that elementary character—positively in a, d, g, o, and q, and approximating in b,

c, e, h, p, v, and w.

The practice in Fig. 2, of drawing curves from c to b, will result in acquiring facility in executing one of the most difficult letters of the alphabet, \mathcal{D} ; taking notice that the upper portion of the curve may be varied into greater breadth or amplitude. It is deemed essential to beauty in writing to give an oval form in the various directions of curves, rather than the formality of a circle.

SLOPING CURVES.

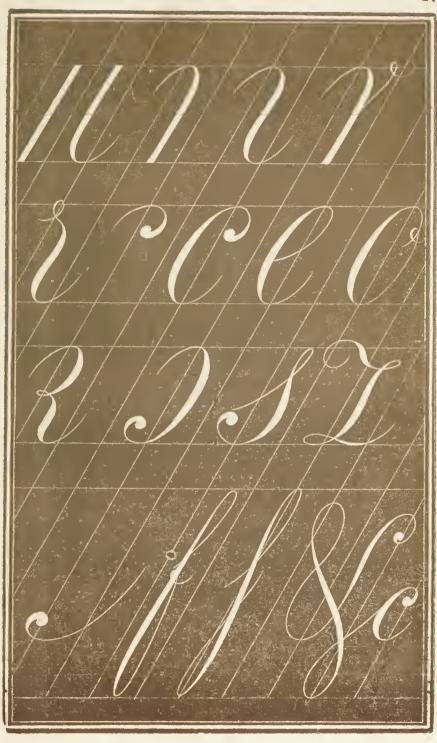


The slope of these figures is determined by the side of an equilateral triangle, of which Fig. 3 is a section, or one half. The angle thus obtained is of 60 degrees, and will regulate the direction of all the stems, as they are called, in writing, as well as the slope of the letters; only deviating a little in some of them for the purpose of obtaining beauty or grace, as in Fig. 1 and 2. Fig. 1. constitutes an essential line in fourteen of the capitals, as $\mathcal{D},\mathcal{B},\mathcal{F},\mathcal{H},\mathcal{J},\mathcal{K},\mathcal{L},\mathcal{P},\mathcal{P},\mathcal{S},\mathcal{I},\mathcal{M},\mathcal{N},$ and \mathcal{A} —eleven of them commencing at the top, and the three last named at the bottom, which may be more or less curved, and commence or terminate with a dot, as at a, Fig. 1. The greater curve of Fig. 2. is the simplest form, after the straight backs, of B, R, and P; the other portions being founded on the elementary forms, as indicated in the perpendicular line of Fig. 3; from which such deviations can be subsequently made in practice as may be suggested by taste.

In practising from these figures, it is recommended to draw them backwards and forwards, until an equal accuracy, facility, and fluency, be acquired. Accuracy in drawing may be obtained by repeated corrections, but fluency is most essential in writing.

ELEMENTARY FORMS IN WRITING.

'The student of drawing, who has sufficiently practised straight and curved lines, will find no difficulty in making them for the purposes of writing, and on any slope that may be desired. He has learned to make lines parallel to each other, and can imitate any curve, according to the bow which it forms, or the direction of its quantity and its proportions within an angle. But the mere beginner at writing, without this preliminary instruction, is obliged to labour assiduously in acquiring the habit of executing these elementary parts, with the proper slope, one by one, before attempting to combine them into letters and words. The elementary forms are here given, in accordance with the system of drawing; the straight strokes being guided by parallelism, and the curves, as segments of circles and ovals, crossing and governed by ruled oblique lines in the requisite angle.









CLASSIFICATION OF THE SMALL ALPHABET.

The whole alphabet, except the capitals, may be classed under five sections; the first composed of lines most easily executed, as i, n, m, u, t, which may be practised in their parts and entire; the second, consisting of those letters which are defined by the oval, as o, a, d, g, q, e, and c; the third of h, y, k, p, l, f, and r; the fourth of v, b, and w, in which the lower part of b and latter part of w, are the same as v, and approaching the o; and the fifth, of x, z, f, and s, the most irregular of all.

According to our principle in drawing, the ovals, or o_r are to be written over the oblique line, which will thus cross them through their centres; the straight or nearly straight strokes will be drawn between the ruled oblique lines, and the curved portions crossing them; except the narrow tops and bottoms of h, y, &c.

This mode of ruling to guide the writer in practising to form single letters, is founded upon the principles in drawing which relate to parallels and the bows of ovals and curves. Those strokes which deviate from exact regularity are easily distinguished in their characteristics by means of the lines which pass through them, or between which they pass; not only showing the right direction in which they should run, but producing forms of spaces, or intervals, the shapes and proportions of which assist the eye in judging of their accuracy.

COMBINATION OF ELEMENTARY FORMS.

The regularly instructed student of drawing may rapidly proceed through the most difficult combinations of letters and words, to acquire the necessary facility of execution. But the uninitiated writer will find it necessary to advance with more limited views, in first practising words which require only the simplest strokes; as in, um, nut, tun, man, &c. gradually proceeding to those which are usually found in the copperplate copies published for the use of schools; as altitude, built, acute, commune, educated, &c. thence to sentences comprising every variety and combination of characters. It is deemed unnecessary to swell with them this manual, which proposes only to teach the first principles. The words lamp, first, crofs, yoke, dozen, bright, wax, and pique, comprise nearly all the essential characters, exclusive of capitals; and other words will be found to require but little variation. The practice of the o cannot be too often repeated. It will be here perceived that in combining letters into words, the measure of the letters cannot be uniformly restricted to equidistant spaces, which may serve, however, as guides in the preliminary practice.

PROPORTION AND CURVE.

I MANA MARINA

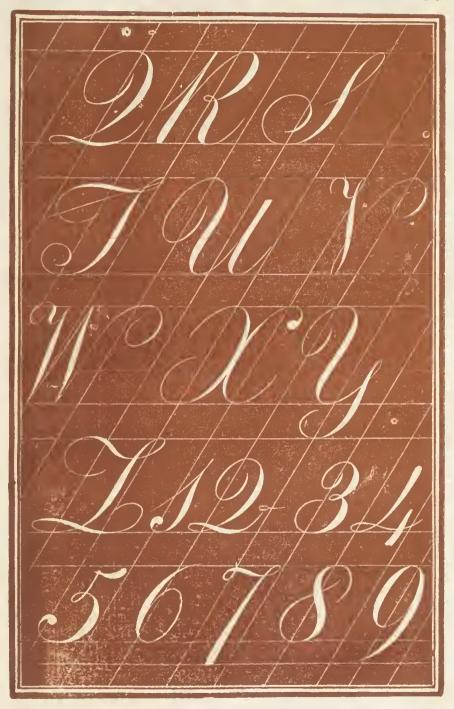
This diagram is intended to show the application of one of our principles in drawing—the direction of the quantities—to the attainment of a certain grace in writing. Instead of rounding the tops in exact symmetry on each side of the lines which guide the slope of the bodies of the letters, the hair stroke commences in the direction of, or parallel with, the oblique line b; between which and the general guide lines will be found the direction of the quantity or bulk of the curved members, as indicated by the lines a—which are more oblique than the guide lines c. This variation, carried to excess, constitutes the angular style.

It is further intended to show the impossibility of subjecting all the letters of the alphabet to one measure of breadth; for here we have begun the i between two of the guide lines, and the n commences on the second line following, allowing only a space and a half for both, instead of two spaces, as in some elementary books. This observation applies to all cases of intermediate hair strokes. It will be observed, also, that the a is wider than one space, by half the thickness of its back line. A similar increase of breadth is requisite in d, g, q, as well as e and e. To prove this, make a e, and then alter its oval into

an e or c, making et, el, or ct, cl; it will be perceived that they are too crowded, and want room to breathe between. No guide lines can be devised to suit indiscriminately the whole alphabet, but they may be used to regulate and define their various proportions, according to the best examples and good taste. They are chiefly useful in fashioning one or two letters at a time, whether according to this plan or any other, and should be dispensed with in the practice of joining-hand copies; in which the eye should require such bulks and spaces as may agreeably accord with the characters of the letters that happen to come together, without any crowding or scattering appearance.













CAPITALS.

The method here employed to exhibit the characteristic features of such simple capitals as are most easily made in writing, is founded on the employment of the same oblique ruled, or guide lines, as in the page of the small alphabet, according to the principles of drawing; the straight, or somewhat straight strokes, being made between the lines—the curves crossing them. The curves are thus divided into sections, whose proportions can more easily be defined than if made on plain paper, until the eye and hand become sufficiently initiated to execute them without such a guide, and even to indulge in some graceful variations. The copperplate copy books will furnish a variety of other capitals, of more or less beauty of form and difficulty of execution, which the writer may be tempted sometimes to employ at the commencement of a paragraph; but the letters here exhibited are simple, neat, and easily executed—which are the most important requisites in writing. Additional lines are drawn through F and I, to indicate the direction of their peculiar curves, which may be varied at pleasure.

Yet it is proper to caution the young and fanciful practitioner against indulging in needless embellishments, to disturb the simplicity of writing, and prevent its being read; consuming time that would be better bestowed on the more careful formation of some letters, which, if too hastily made, must be inaccurate or illegible. Since the great purpose of writing is to be understood, simplicity of form, with certainty and facility of execution, are more

desirable than curious and bewildering flourishes; yet every elegance in the fashions of writing may be ultimately cultivated by those who have a fancy for such refinements. It appears, therefore, to be of primary importance in seeking the power and advantages of writing, to divest it of all needless incumbrances, to articulate every letter distinctly—and, as in music, to understand the air before attempting any variations.

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COPIES FOR PRACTICE.

Twenty-four copies are here given, commencing with the most easily formed capitals, and written in the manner of small hand, for which it is preparatory. course which is usually pursued in learning to write, enjoining the absolute necessity, undeviatingly from the first stroke to the last, of giving the exact swell and hair stroke to every letter, greatly retards the progress of the learner, whose first and chief attention should be directed to the forms and proportions of letters. Besides, as every person's experience shows, the regular and alternate succession of hairstroke and swell, which has been acquired with so much labour at the copy-book, is almost entirely incompatible with that facility which the business of life requires; and the rapidity, which is often subsequently practised, is attained by abstaining from the effort to swell, except in a few letters, which serve to give some force and effect to the page. Is it not reasonable, therefore, so to instruct the writer, that he shall have nothing to unlearn? And to obtain the essential use of writing before any attempts be made at the embellishment of it? The style of writing which is taught in large hand copies, is seldom wanted, and may much more easily be learned after the student is able to draw the letters correctly, and write them fluently; which depends less upon the motion of the joints of the fingers and thumb, than upon that of the wrist and elbow, with an occasional exception.

It is of great importance to contract a habit of writing capitals in the most simple manner, and to define them neatly and clearly. \mathcal{O} , \mathcal{IR} and \mathcal{O} , are often preferred to the more elaborate \mathcal{I} , \mathcal{M} , and \mathcal{N} , which may be reserved for the display of some commencing paragraphs. When the lower curves of \mathcal{C} , and \mathcal{C} , are continued into the following letter, it will be found to be conducive to neatness and despatch. \mathcal{F} by terminating straight, with its peculiar central mark, which connects with the following letter, may be distinguished from \mathcal{I} , which cannot be so connected.

As a general rule, b, h and l should be made with curved tops, but d and k with straight stems or backs; and if the descending stroke of f terminate without curve, it can never be mistaken for long f; besides, f and t require to be crossed; which is more neatly done after a straight termination, with some exceptions, depending on the succeeding letter, as te, to.

In writing fast, it is needless to commence the backs of a, g, and g, so high as in a formal copy, but from the terminating side of the o; nor is it necessary that the o, so often required, should be carefully rounded at the top, as the hair stroke from the preceding letter may often pass directly to the top, which may there commence and terminate, and thence pass to the next letter, leaving the of necessarily pointed. Indeed, it is impossible to write fast without forming the letters somewhat sharp at the top and bottom, producing more compactness, and requiring a sensible stopping for the return stroke, until great prac-

tice may enable the writer to measure out the words in a rapid and steady stream. In writing fast, the a is often formed continuously from the preceding letter, like an e. with a back to it. It is well to practise this neatly, for the sake of fluency, though it is certainly handsomer when more deliberately and distinctly written.

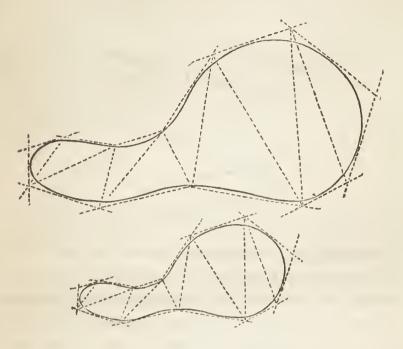
Many persons contract a vicious habit of making their letters unconnected. This limping gait should be counteracted by an especial practice of the contrary, at moments when nothing but this circumstance may occupy the attention. So, also, in order to correct the hand from any tendency to what is called a scrawl, it will be found advantageous to write, with one continuous light stroke, words with letters as long as large hand, but narrow as the smallest, viz.:

Amull amulmatin.

This will be found to give fluency, parallelism, and lightness, as well as condensation. Further, to correct a carelessness which frequently arises from a sensation of impatience, it is recommended to practise a distinct hand, either perfectly perpendicular, or leaning a little but not too much back, as by walking down hill, a habit of stooping may be corrected. This manner of writing requires a deliberate articulation, and has been found effectual in curing or preventing irregularity and indistinctness, and in giving facility in whatever style of writing is to become the instrument of daily use.

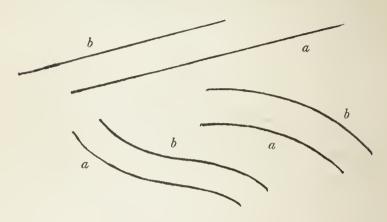
Having introduced the system of writing as connected with drawing, at a time when the learner was best prepared for it; and having explained its principles in the most simple manner, the lessons of drawing may now be resumed; during the progress of which, the student of writing may, if desirable, cultivate a more ornamental style with greater facility and certainty of success.

IRREGULAR CURVES WITHIN ANGLES.



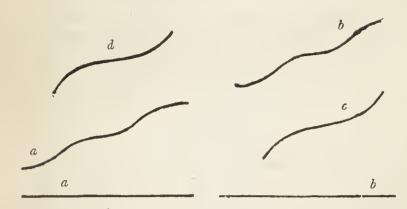
All irregular forms may be circumscribed by angular lines, which are supposed to touch the outer or inner projections of the object. Such an angular figure may be imitated larger or smaller, by supposing the lines of the triangles extended or diminished. Consequently, an imitation of the irregular form may be drawn within or without it; or so drawn as to admit of a corresponding arrangement and proportion of angles, by which its accuracy may be tested; only taking care that the lines of these triangles, or any one as a guide line, shall run in the same or parallel direction, by which the triangles must inevitably maintain their relative proportions.

COMPARISON BY PARALLEL.



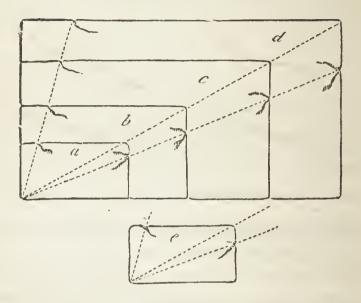
After practising straight and curved lines in all their varieties and combinations, it is desirable to possess an infallible rule to assist our observation and direct our practice. This will be found in the comparison by parallel, which is a silent but faithful monitor, and always at hand. It is manifest, that every imitation of a line, straight or curved, in any direction, must be made parallel to it, as a to b. In this exercise, the eye will soon become a perfect judge: the practice must commence with lines drawn closely parallel, proceeding to others more distant from the model, and finally to lines obliquely distant; the accuracy of which may be tested by the student, by holding the copy in such a position as to make it parallel with the original. If, in seeking such parallelism, with the whole or any part, it be found necessary to hold the paper crooked, the copy cannot be true, and must be corrected until it be made so parallel with the model, that both may be held square with each other.

CONTINUITY OF LINE.



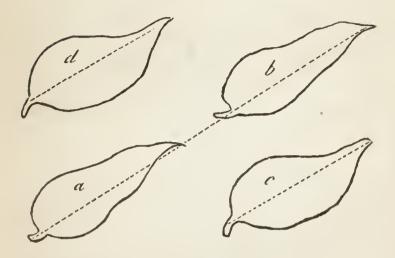
When the copy of any object is made upon a separate piece of paper, its accuracy may also be found in the continuity of line. Hold your paper square, and bring it so that the line you are making, or a line drawn through it, if it be supposed to be extended, would touch the commencement of the object or model, and appear continued through it in the same direction and to the same termination, as from a to b. This rule applies equally to lines which are not perfectly straight, by observing their general direction; because if you are obliged to hold your paper out of its perpendicular or horizontal in order to bring the lines to a perfect continuity, or similar direction—the drawing is false, and must be corrected. slightest error may thus be perceived, as well by the uncultivated eye as by that of a master, and, therefore, b this and the preceding rule, may be corrected with abso lute certainty. In the above diagram c and d are liquely parallel with each other.

RELATIVE PROPORTION.



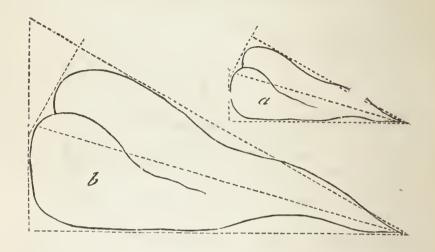
The utility of the comparisons by parallel and continuity of line is very obvious in imitating an oblong ob-For, by supposing a line drawn from one corner obliquely to the other, or to any other portion of its outline, you have only to imagine lines running in parallel directions, and your copy of the object, of whatever length you make it, must necessarily possess the same proportion of breadth, which belongs to the object to be copied; without the necessity of measuring in order to ascertain that it be longer by a half, third, &c.; for, if a line drawn in your copy from one corner diagonally to the other be found not to be parallel with that of your original, or in exact continuation, then is the copy untrue; the figures b, c, and d, or any intermediate intersections, possess the exact proportions of the figure a, of which e is a copy of equal size.

DIRECTION OF QUANTITIES.



A delicate and important application of these rules is in reference to the direction or the parallel of quantities. In a circle the quantity is equal in all directions, but in an oval it runs in the direction of its length, and the imitation must be made in the same direction, as a and b, or the same parallel, as c and d. It will require very little practice of the eye to acquire sufficient correctness in imagining a line to run midway through the length of any object. Besides, a middle line so running would indicate the bows or quantities of the curves on each side, with all their variations of swell or angularity.

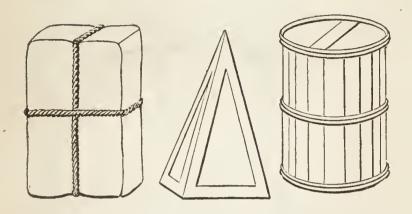
ANGLE AND DIRECTION.



Forms made or bounded by lines running in similar directions must necessarily resemble each other; and as all forms which may be comprised within certain angles may be represented within similar angles, either of the same or smaller or larger dimensions,—therefore, whether a be copied in small from b, or b in large be copied from a, their relative proportions are perceived to be geometrically correct, and their situations to lie in the same or parallel direction.

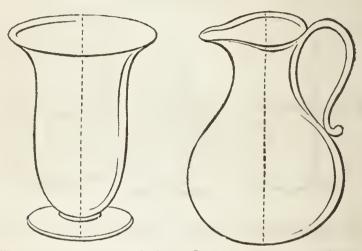
The student of drawing can scarcely decide when he is sufficiently instructed, until brought to the rigid test of enlarging or diminishing his copy; as this effectually calls into operation all the rules of angle, direction, and proportion.

SIMPLE FORMS IN NATURE.



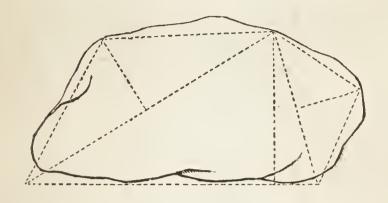
The student, having made himself acquainted with the elements of drawing, and having familiarized his eye to correct perceptions, and his hand to the practice of correct imitations of the various figures which serve to illustrate them; and having attained sufficient facility of execution, should now study to apply those rules, by drawing various forms in nature, from the objects themselves; commencing with the most simple, which consist of straight lines, advancing gradually to the curved and irregular forms. There is no want of opportunity—a book, tumbler, hat, shoe. When the pencil is in hand, it should never be unemployed; and no object is too trifling to give it practice. The writer must scribble, and the draughtsman sketch, on waste paper—which is then not wasted.

PRACTICE FROM WELL KNOWN OBJECTS.



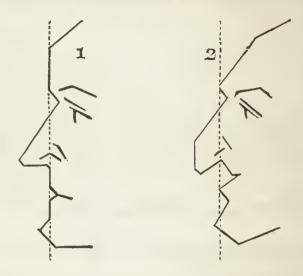
The advantages of first drawing regular figures, is that the eye becomes accustomed to the measuring and proportions of the parts; and afterwards, in drawing from irregular objects, can readily perceive how much they deviate from regularity. When a sufficient practice has been obtained in all the combinations of straight and parallel lines, triangles, circles, ovals, and curves, with a proper application of all the rules, until absolute certainty is obtained; it will then be safe and proper to study the rules of deviation, especially in imitating well known objects, which should be studied in different directions and situations, and always drawn as if on a glass held between them and the eye. If any difficulty be experienced, it will be removed by having recourse to the glass itself, observing to shut one eye, in tracing the figure on the glass.

ANALYSIS OF IRREGULAR FORMS.



Students of drawing, who have not advanced by regular gradations, and correctly learned the elements, find the greatest difficulty in drawing such figures as mountains, rocks, trees and animals. This difficulty is lessened by resolving those forms into their elementary qualities, as squares, oblongs, triangles, and circles, or portions of them; and especially by noticing the sections of the irregular curves, explained in a former diagram, as so many bows, by imagining, or slightly marking the strings or chords, and observing the shapes of the swells, and the direction of the straight lines, chords, or bases, and the proportion of the angles. By the union of these rules, the most irregular figure may be represented with accuracy.

STRAIGHT LINE AND DEVIATIONS.

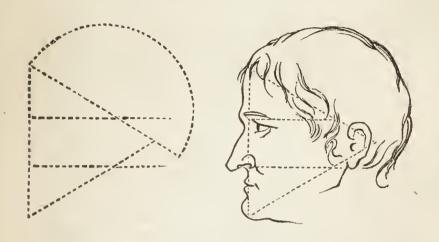


Even the human face, whatever be the proportions of its parts, can be defined within certain angles, the length and direction of which constitute the character of the features. Fig. 1 is an example of the profile consisting of a few angular deviations from a straight line. Fig. 2 is an example of one composed of angular lines, wholly deviating from a straight line.

Angular lines define the utmost limits of all forms; and not only restrain the easy flow of a curved line from trangressing the proper bounds, but often give energy to forms, which otherwise would be insipid, and devoid of character.

Front views of the face are subject to the same rules, but are more difficult only because of the greater number of parts to be compared with each other; which, however, it is best to mark off in angular admeasurements by the eye, before rounding them into their ultimate forms.

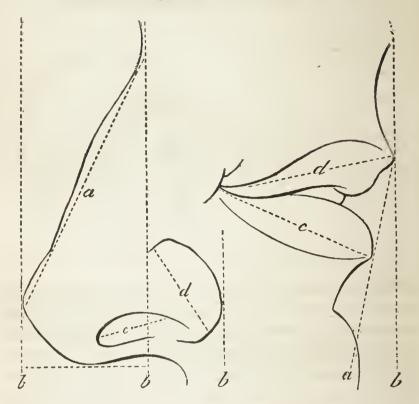
APPLICATION OF THE TRIANGLE.



The proportions of the human face in profile, may be drawn on a triangle, the perpendicular line of which must be divided into three parts; the upper one for the forehead, the middle space for the nose, and the lower division for the mouth and chin. A great variety of features may be drawn with these and other proportions, and the eye habituated to the necessary comparisons of length and breadth. Many individuals have some of these spaces longer or shorter, and the ear higher or lower, as well as the skull more or less angular, or circular.

In all drawings, where the parts are numerous, it is necessary frequently to compare their relative proportions of length, breadth, or distance, and especially to notice such points as are of equal length, and the amount of variation from the perpendicular and horizontal.

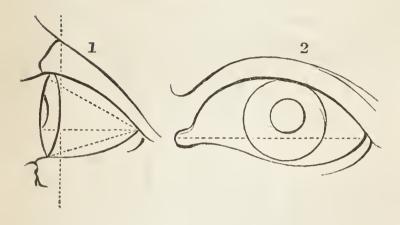
FEATURES.



It is recommended to draw from the human features, as the surest, most pleasant, and useful means of refining the taste and skill. No straight lines enter into their composition, and the curves, which can be referred to elementary rules, possess the advantage of being of such sensible importance, that their slightest deviations must be observed.

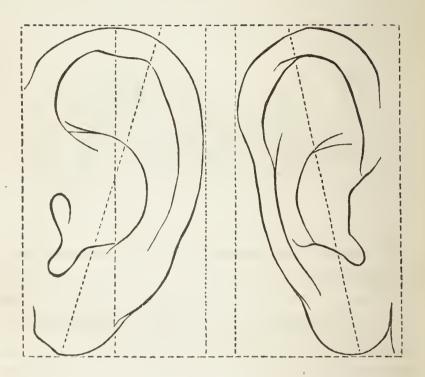
The projection of the nosc is determined by its oblique direction a in reference to the perpendicular b. The nostril and its opening not only have their proportionate bulks, but especially require attention to the direction of their quantities c and d. The depth of the mouth, also, is determined by the perpendicular b, the retiring of the lower lip, by the oblique line a. The proportion and opening of the lips by the triangle from their corner which, by the rules previously studied, exhibits the direction of their quantities, c and d, and the irregular bows on either side.

FEATURES.



By means of the perpendicular and horizontal lines, which are dotted in Fig. 1, it will be easy to mark the projection of the lids and curvature of the iris. The height of the outer corner of the eye varies in different individuals—in this it is below the centre. It will be observed in Fig. 2, that the bow above the horizontal line swells most towards the inner corner, and the bow of the lower lid swells most towards the outer corner; which is most generally the case. Young artists are apt to delineate the eyes with the upper and lower lids as two regular bows sharp at each corner, which makes them cat-like.

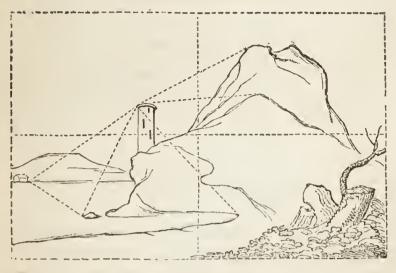
FEATURES.



The Ear exhibits a greater variety of curved lines than any other feature, and therefore furnishes a good example for the application of the principal rules; its oblong proportion, showing deviations from the perpendicular and horizontal lines; and its directions of quantities, involving all that relates to angle, oval, and bow; which it is needless to repeat here.

There is often great beauty in the ear, depending on the flow of its lines and the proportion of its parts. It is therefore an excellent object to study from nature, especially as it does not embarrass the student by a change of expression.

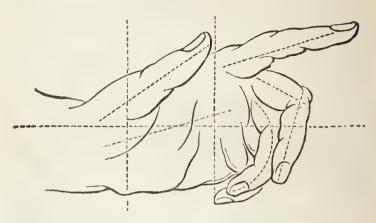
SITUATION BY SIMILARITY OF ANGLES.



The same rules which relate to the parts of one object will apply to the situation of different objects, whose distance and relative height may, with similar accuracy, be defined by angles. This is most evident when the objects are already drawn on paper; but when they constitute a view in nature, by imagining a plane or sheet of glass, placed parallel with the eyes, between them and the object, it will readily appear, by looking through one eye, that on this plane triangles may be drawn, connecting any given points in the scene; in the imitation of which, by the proportions of similar triangles, the distances between the objects to be represented may be accurately defined.

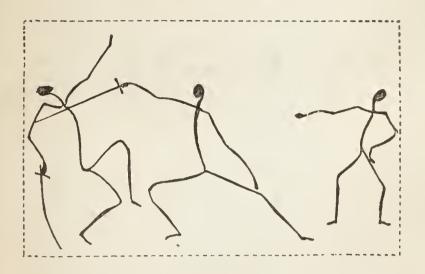
It must be now clearly established, that any three points on paper, or in a natural view, by supposing them to be the points of triangles, may be imitated by making three similar points, necessarily producing a similarity of position in those points; being the tops, bottoms, centres, or corners of objects. From any two of these points already ascertained, another may be selected for some other object, and so on to the greatest number of parts. And these may be drawn of any size, because their relative proportions are always accurately defined by the direction in which the lines appear to run between each part and every other part.

COMPLEX FORMS.



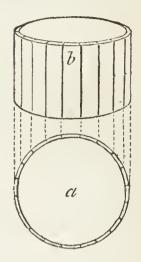
Complex figures only require a repetition of the rules which relate to general proportions, extending their application to minute parts. The horizontal and perpendicular lines which cross the above hand, will go far in assisting the copyist; but if to these guides be added those afforded by the oblique lines, to mark the direction of the quantities, he not only obtains other angles to govern him, but lines by which to compute the nature of the curves on either side of them. In every effort of drawing, it is essential to make frequent use of the perpendicular and horizontal comparisons,—as in the figure before us, a perpendicular line being supposed to rise from the point of the little finger, will be found to approach the thumb; and a horizontal line passing from the upper extremity of the forefinger will be a little above the point of the thumb. If every part of a drawing be thus tested by means of perpendicular and horizontal lines, parallels of direction and curvature of bows, with the true angles of their chords,—it is impossible that it should be incorrect, without the aid of a master's eye to pronounce a judgment.

CENTRE OF MOTION AND DIRECTION.



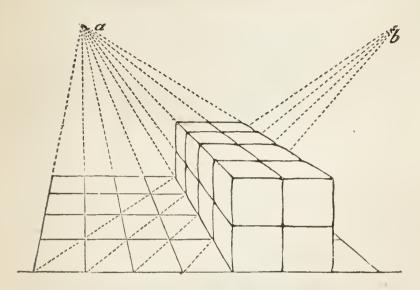
Nothing can more pleasantly show the importance of attending to the direction of quantities, than the character of action and proportion possessed by the few lines in such ideas of figures as the above. These are not outlines, but centres of motion and direction; nor are they skeletons, as the bones are seldom at the centre of a limb. No human figure, nor that of any animal, can be accurately represented, no matter how beautiful the outlines are that may be drawn, unless the centre of motion at the joints, and the direction of the head and limbs, be indicated with correctness and character.

PERSPECTIVE.



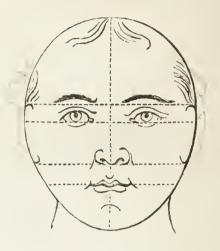
For the purpose of drawing on a plain surface the appearance of objects which exhibit more than one side, and to represent those which are at a distance, it is necessary to know some of the rules of perspective. The first and simplest idea of it is conveyed in a diagram to show how the staves of a bucket, or the flutings of a column appear to diminish in breadth as they become oblique to the eye. The ground plan of the bucket a, having the staves marked of equal width, parallel lines drawn from them to the elevation b will necessarily represent the staves with the respective dimensions, apparently diminishing at the sides.

PERSPECTIVE.



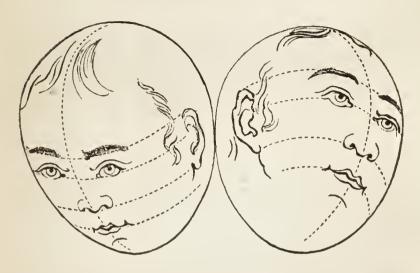
The nature of Perspective may be made evident by observing buildings through a window or pane of glass. Shut one eye, hold the head as still as possible, and with the finger at arm's length, touching the glass, point to all the principal parts. It will be found that the lines of planes exactly in front are horizontal and parallel; whereas those which run, from the right or left of the spectator, in the direction in which he looks,—buildings, fences, pavements, &c. seem to converge towards a centre in the horizon opposite and as high as the observer's eye, which is called the point of sight a. The point of distance b determines depths by lines intersecting those to the point of sight from the measurements on the front base or horizontal line. Perspective instruments are constructed on this principle :—a sheet of glass is thinly coated with gum water, having a little sugar in it, upon which the scene may be traced with black crayon; the eye being stationary by means of a small hole, which may be adjusted to different distances. Other rules of perspective may be learned from the Treatises.

STUDY OF THE EGG.



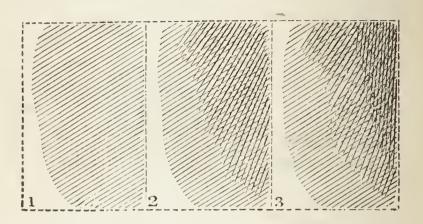
For the purpose of advancing a step in the knowledge of rotundity and perspective, as they affect the appearance of the human head, it is recommended to mark the features on a hard boiled Egg—a raw one might give unnecessary trouble. Draw a line lengthwise, then cross lines for the eyebrows, eyes, nose, ear, mouth, and chin. On these lines the general forms of the features may be drawn. Oblique views of these convey good general ideas of their relative places on a surface so unlike a plane, and somewhat resembling the human head, without any phrenological development—remembering to make all due allowance for the projection of the nose and other features, of which the Egg can only exhibit a me dium base.

PERSPECTIVE OF THE EGG.



The chief service to be derived from the Egg, having features marked as before directed, is to explain the general principle of perspective obliquity. This is not so much a model to be imitated, as a simple demonstration to show how the straight lines, upon which the features are drawn, become curves either upward or downward, as the face is to be represented looking up or down and more or less sidewise. In drawing from the living face, every deviation from the insipidity of the mere egg-shape must be duly noticed and marked, especially the humanizing projections of the chin and nose.

SHADING.



During the frequent attempts which the young Student by this time has made in drawing from artificial and natural objects, he must have remarked the various effects of shadows, by means of which protuberance, flatness, and coneavity, are characterized. An even shade is produced by lines more or less fine, drawn parallel, or nearly so, to each other, as Fig. 1. This shade is deepened by other lines erossing them obliquely, as Fig. 2, and still deeper by others, as Fig. 3. These, however, are eoarse and obvious examples of the principle. Finer and eloser lines, drawn with peneil or pen, may produce shades of softer gradations. Rounded objects are represented by employing the same process in proportion as the surface recedes from the light—observing that generally the dark side is partially illuminated by light reflected from some neighbouring source. Shadows have their centres, directions, angles, and curves, as well as length and breadth, expressive of the forms by which they are influenced, and the reflections by which their intensity is lessened; each reflected light producing its own system of shadows within the general shade.

NOTICES OF THIS WORK.

ALBANY ACADEMY.

AT a meeting of the Trustees of the Albany Academy

held April 11th, 1835, it was

Resolved, "That Mr. Rembrandt Peale's Book, entitled 'Graphics,' be introduced as a text book in the Albany Academy."

D. ROMEYN BECK.

SAMUEL F. B. MORSE,

President of the National Academy of Design.

"Your views of Drawing are philosophical, and your speculations evidently the result of an experienced and well-taught mind. The Graphics supply a most important place (hitherto not filled) in youthful education, and I cannot but think it will be extensively popular."

JAMES KENT,

 ${\it Ex-Chancellor of New-York.}$

"It is executed with skill and judgment, is clear and accurate in thought and expression, and is so condensed as to be evidence of much labour and reflection." "The principles are so simple and elementary, that they can be readily understood; and I do not hesitate to add my testimony in favour of its use and value."

THOMAS SULLY,

Portrait Painter.

"I have carefully examined your little treatise on Drawing and Writing, and find it an excellent compendium of the elementary principles of each." "I hope your little work will introduce the plan of making Drawing a component part of education in all our schools."

CHARLES ANTHON,

Rector of Columbia College, New-York.

"I am so much pleased with it, that it is my intention to promote, in every possible way, its extensive use in our Seminaries of Instruction."

JOSEPH HOPKINSON,

President of the Pennsylvanian Academy of Fine Arts.

"I commend much its perspicuity, and the intelligible manner in which you have explained things that I think are very difficult of explanation. Your principles seen to me to be correct, and the more valuable for their simplicity."

DAVID HOSACK, M. D.

"I cannot but believe that your analysis of Writing and Drawing is calculated to prove useful in advancing and facilitating those branches of education."

JOSIAH QUINCY,

President of Harvard College.

"Of the merits of your work I speak after the language of those whose judgments concerning your art and design are better than mine—they are approved, and it will, I doubt not, be useful. The humility of its pretensions will be no impediment to its success."

MISS E. LESLIE.

"We may look forward to the time, which we trust is not far distant, when the elements of Drawing will be taught in every school, and considered as indispensable to education as a knowledge of writing. It has long been our belief that any child may (with proper instruction) be made to draw, as easily as any child may be made to write. We are rejoiced to find that so distinguished an artist as Rembrandt Peale has avowed the same opinion, in giving to the world his invaluable little work on Graphics; in which he has clearly demonstrated the affinity between drawing and writing, and admirably exemplified the leading principles of both."

UNITED STATES GAZETTE.

"There has been no initiatory volume prepared for the pupil in drawing that may claim any comparison with it. Indeed we think that one hour a day devoted to this book, by any child of good capacity, would in the course of a few months insure a better idea of drawing, than has usually been obtained in whole years of common practice. We regard drawing not merely as a mechanical acquirement, but as the means of correcting the judgment upon visible objects, and teaching the eye to scan correctly the form, and judge of the proportion of parts."

NEW-YORK MIRROR.

"Peale's Graphics.—It is a Manual, or collection of simple rules and hints for the use of those who would

learn to draw or write, and the suggestions really seem to have a great deal of sense in them. We have never even thought of attempting the first of these two arts, but Mr. Peale has almost persuaded us to begin, his system appears to be so natural and simple. The root of his theory is, that drawing and writing are but different applications of the self-same principles, and that every one who can use a pen, may also use a pencil. The principles common to both modes of delineation are briefly, yet clearly explained; and rules of practice are laid down which we can readily believe to be judicious and effectual."

LITERARY GAZETTE.

"Without going so far as to say that the author of the little work before us has fully supplied the required desideratum, we think it due to him to observe that there is considerable force in the arguments used by him, and if experience should confirm his theory in but a moderate degree, he will have performed two great services to society; for he will make the rising generation draughtsmen as well as penmen. There is one feature in this little work which must be recommendatory. It is couched in good language, perspicuous in its details, and free from egotism. We wish it success; and whether the results of the plan there laid down, or the stimulus which it may impart to the promulgation of a still more rational mode of tuition, shall produce improvement in the arts of which they treat, the public will still be greatly benefitted, and will owe an obligation to Rembrandt Peale."

NEW ENGLAND MAGAZINE.

"As far as we are able to judge, from a limited acquaintance with the science of which this Manual proposes to explain the theory, by the application of certain principles, we would recommend this little volume most

warmly to the public attention. It comes recommended by a clear, and well written preface, as well as by an absence of pretensions, which is, after all, one of the highest encomiums which can be pronounced. The name of the author is familiar to all lovers of art in the country; and we unhesitatingly recommend this little Manual, because we feel assured that no lessons are taught, which would not improve the young pupil."

THE STAR.

"We do not know when we have perused a little work which has given us more pleasure. Its object is to inculcate in plain, easy instructions, assisted by a series of beautiful plates, the first principles of drawing and writing, which the author clearly shows to be founded on the same mathematical rules. We applaud Mr. Peale's liberality of feeling, in putting so high an estimate on human capacity, as to suppose, that drawing is an art so easy to be accomplished. He is yet more to be applauded for devoting his eminent talents, as he has done, in this unpretending volume, to the purpose of rendering the first elements of his profession familiar to all who may desire to know if they, in reality, are gifted with the genius of the pencil."

NEW ENGLAND GALAXY.

"This production is the idea of a strong mind, strongly operated upon for years, in a department of education greatly neglected, and yet of indispensable importance in the every day transactions of the commonest life. We recommend it heartily to the attention of all instructors—and of course, to all fathers and mothers: to mothers first, however, before all and above all."

PROSPECTUS

OF A

PROGRESSIVE DRAWING BOOK,

COMPRISING A

SERIES OF EASY LESSONS,

BY REMBRANDT PEALE.

For general instruction in the Art of Drawing, the Manual, by R. Peale, is deemed sufficiently minute to explain the fundamental principles, and extensive for elementary practice; but the Author, whose object is to make Drawing as common as Writing, and writing more simple and easy, is aware, that amongst the multitude who may be satisfied with the mere facility of delineating the outlines of objects, there must be many whose taste may lead them to desire a more extensive acquaintance with the art, either as an agreeable and elegant accomplishment, or for practical purposes in painting, engraving, &c., and in various manufactures. For them it will be necessary to enlarge the field of study, and to present examples and lessons of greater variety and complication of parts-eommencing with the most simple, and gradually advancing to the most intricate and difficult, so as to render them comparatively easy.

This work, which is now in hand, will be published in numbers, each containing six plates, and afforded at a price so moderate as to place it within the reach of all.









